In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

B1

1. (Currently amended) A spin-valve thin-film magnetic element comprising:

a laminate comprising at least a free magnetic layer and a pinned magnetic layer and exhibiting a magnetoresistive effect;

a pair of hard bias layers lying at least on both sides of the free magnetic layer in the track width direction and orienting the magnetic moment of the free magnetic layer in one direction;

a pair of insulating layers extending over the hard bias layers and both top ends of the laminate in the track width direction; and

a pair of lead layers extending on said pair of insulating layers,

wherein said pair of lead layers have overlay sections which extend towards the center of the laminate and ~~are in direct contact with parts of the laminate~~ edges of the overlay sections extend beyond ends of the insulating layers towards the center of the laminate, the edges of the overlay sections being in contact with the laminate.

2. (Original) A spin-valve thin-film magnetic element according to claim 1, wherein the width of the edge of each of the overlay sections in the track width direction is in the range of 0.01 μm to 0.05 μm.

3. (Original) A spin-valve thin-film magnetic element according to claim 1, wherein the insulating layers comprise at least one oxide selected from the group consisting of aluminum oxide, silicon oxide, tantalum oxide, titanium oxide,

zirconium oxide, hafnium oxide, chromium oxide, vanadium oxide, and niobium oxide.

4. (Original) A spin-valve thin-film magnetic element according to claim 1, wherein each of the insulating layers has a thickness in the range of 0.5 nm to 20 nm.

5. (Original) A spin-valve thin-film magnetic element according to claim 1, wherein each of the overlay sections has a thickness in the range of 0.1 μm to 0.3 μm in the track width direction.

6. (Original) A spin-valve thin-film magnetic element according to claim 1, wherein the laminate comprises the free magnetic layer, a nonmagnetic conductive layer, and an antiferromagnetic layer, for pinning the magnetic moment of the pinned magnetic layer by an exchange coupling magnetic field, which are deposited in that order.

7. (Withdrawn) A spin-valve thin-film magnetic element according to claim 1, wherein the laminate comprises a nonmagnetic conductive layer, the pinned magnetic layer, and an antiferromagnetic layer, for pinning the magnetic moment of the pinned magnetic layer by an exchange coupling magnetic field, which are deposited, in that order, on each of the two sides of the free magnetic layer in the thickness direction.

8. (Original) A thin-film magnetic head comprising a spin-valve thin-film magnetic element according to claim 1, the spin-valve thin-film magnetic element

functioning as a read element for magnetically recorded information.

9. (Original) A thin-film magnetic head according to claim 8, wherein the width of the edge of each of the overlay sections in the track width direction is in the range of 0.01 μm to 0.05 μm.

10. (Original) A thin-film magnetic head according to claim 8, wherein the insulating layers comprise at least one oxide selected from the group consisting of aluminum oxide, silicon oxide, tantalum oxide, titanium oxide, zirconium oxide, hafnium oxide, chromium oxide, vanadium oxide, and niobium oxide.

11. (Original) A thin-film magnetic head according to claim 8, wherein each of the insulating layers has a thickness in the range of 0.5 nm to 20 nm.

12. (Original) A thin-film magnetic head according to claim 8, wherein each of the overlay sections has a thickness in the range of 0.1 μm to 0.3 μm in the track width direction.

13. (Original) A thin-film magnetic head according to claim 8, wherein the laminate comprises the free magnetic layer, a nonmagnetic conductive layer, and an antiferromagnetic layer for pinning the magnetic moment of the pinned magnetic layer by an exchange coupling magnetic field which are deposited in that order.

14. (Withdrawn) A thin-film magnetic head according to claim 8, wherein the laminate comprises a nonmagnetic conductive layer, the pinned magnetic

layer, and an antiferromagnetic layer for pinning the magnetic moment of the pinned magnetic layer by an exchange coupling magnetic field are deposited, in that order, on each of the two sides of the free magnetic layer in the thickness direction.

15. (Currently amended) A floating magnetic head comprising a slider and a thin-film magnetic head which is provided on one side face of the slider, the thin-film magnetic head comprising a spin-valve thin-film magnetic element according to claim [[8]] 1, the spin-valve thin-film magnetic element functioning as a read element for magnetically recording information.

16. (Original) A floating magnetic head according to claim 15, wherein the width of the edge of each of the overlay sections in the track width direction is in the range of 0.01 μm to 0.05 μm.

17. (Original) A floating magnetic head according to claim 15, wherein the insulating layers comprise at least one oxide selected from the group consisting of aluminum oxide, silicon oxide, tantalum oxide, titanium oxide, zirconium oxide, hafnium oxide, chromium oxide, vanadium oxide, and niobium oxide.

18. (Original) A floating magnetic head according to claim 15, wherein each of the insulating layers has a thickness in the range of 0.5 nm to 20 nm.

19. (Original) A floating magnetic head according to claim 15, wherein each of the overlay sections has a thickness in the range of 0.1 μm to 0.3 μm in the track width direction.

20. (Original) A floating magnetic head according to claim 15, wherein the laminate comprises the free magnetic layer, a nonmagnetic conductive layer, and an antiferromagnetic layer for pinning the magnetic moment of the pinned magnetic layer by an exchange coupling magnetic field which are deposited in that order.

21. (Withdrawn) A floating magnetic head according to claim 15, wherein the laminate comprises a nonmagnetic conductive layer, the pinned magnetic layer, and an antiferromagnetic layer for pinning the magnetic moment of the pinned magnetic layer by an exchange coupling magnetic field are deposited, in that order, on each of the two sides of the free magnetic layer in the thickness direction.

22- 27. (Cancelled)

28. (Withdrawn) A spin-valve thin-film magnetic element comprising:

a substrate;

a laminate on the substrate, the laminate comprising at least a free magnetic layer and a pinned magnetic layer and exhibiting a magnetoresistive effect;

a pair of hard bias layers lying at least on both sides of the free magnetic layer in the track width direction and orienting the magnetic moment of the free magnetic layer in one direction;

a pair of lead layers lying at least on the hard bias layers; and

a pair of insulating layers, each lying at least between one side face of the

laminate in the track width direction and each hard bias layer,

wherein the pair of lead layers have overlay sections which extend on parts of the laminate, the edges of the overlay sections being in contact with the laminate.

B1 cont

29. (Withdrawn) A thin-film magnetic head according to claim 28, wherein each of the insulating layers has a thickness in the range of 0.5 nm to 5 nm at the side faces of the laminate.

30. (Withdrawn) A thin-film magnetic head according to claim 28, wherein the insulating layers comprise at least one oxide selected from the group consisting of aluminum oxide, silicon oxide, tantalum oxide, titanium oxide, zirconium oxide, hafnium oxide, chromium oxide, vanadium oxide, and niobium oxide.

31. (Withdrawn) A thin-film magnetic head according to claim 28, wherein the insulating layers further extend between the hard bias layers and the substrate.

32. (Withdrawn) A spin-valve thin-film magnetic element according to claim 31, wherein the hard bias layers and the insulating layers are separated by bias underlayers.

33. (Withdrawn) A spin-valve thin-film magnetic element according to claim 28, wherein the insulating layers further extend on the top ends of the laminate in the track width direction, and the overlay sections of the leads extend

toward the center of the laminate compared with the insulating layers and are in contact with the laminate.

34. (Withdawn) A spin-valve thin-film magnetic element according to claim 33, wherein the insulating layers have a thickness in the range of 0.5 nm to 20 nm at top ends of the laminate.

35. (Withdrawn) A spin-valve thin-film magnetic element according to claim 28, wherein the edges of the overlay sections in the track width direction have a thickness in the range of 0.01 μm to 0.05 μm in the track width direction.

36. (Withdrawn) A spin-valve thin-film magnetic element according to claim 35, wherein the edges of the overlay sections in the track width direction have a thickness in the range of 0.1 μm to 0.3 μm.

37. (Withdrawn) A spin-valve thin-film magnetic element according to claim 28, wherein the laminate comprises the free magnetic layer, a nonmagnetic conductive layer, and an antiferromagnetic layer, for pinning the magnetic moment of the pinned magnetic layer by an exchange coupling magnetic field, which are deposited in that order.

38. (Withdrawn) A spin-valve thin-film magnetic element according to claim 28, wherein the laminate comprises a nonmagnetic conductive layer, the pinned magnetic layer, and an antiferromagnetic layer, for pinning the magnetic moment of the pinned magnetic layer by an exchange coupling magnetic field, which are deposited, in that order, on each of the two sides of the free magnetic

layer in the thickness direction.

B1 cont'd

39. (Withdrawn) A spin-valve thin-film magnetic element according to Claim 28, wherein other insulating layers extend between the hard bias layers and the lead layers and to the ends of the laminate in the track width direction.

40. (Withdrawn) A thin-film magnetic head comprising a spin-valve thin-film magnetic element according to claim 28, the spin-valve thin-film magnetic element functioning as a read element for magnetically recorded information.

41. (Withdrawn) A thin-film magnetic head according to claim 40, wherein the insulating layers have a thickness in the range of 0.5 nm to 20 nm at top ends of the laminate.

42. (Withdrawn) A thin-film magnetic head according to claim 40, wherein the insulating layers comprise at least one oxide selected from the group consisting of aluminum oxide, silicon oxide, tantalum oxide, titanium oxide, zirconium oxide, hafnium oxide, chromium oxide, vanadium oxide, and niobium oxide.

43. (Withdrawn) A thin-film magnetic head according to claim 40, the insulating layers further extend between the hard bias layers and the substrate.

44. (Withdrawn) A thin-film magnetic head according to claim 43, wherein the hard bias layers and the insulating layers are separated by bias underlayers.

45. (Withdrawn) A thin-film magnetic head according to claim 40, wherein the insulating layers further extend on the top ends of the laminate in the track width direction, and the overlay sections of the leads extend toward the center of the laminate compared with the insulating layers and are in contact with the laminate.

46. (Withdrawn) A thin-film magnetic head according to claim 45, wherein the insulating layers have a thickness in the range of 0.5 nm to 20 nm at top ends of the laminate.

47. (Withdrawn) A thin-film magnetic head according to claim 40, wherein the edges of the overlay sections in the track width direction have a thickness in the range of 0.01 μm to 0.05 μm in the track width direction.

48. (Withdrawn) A thin-film magnetic head according to claim 47, wherein the edges of the overlay sections in the track width direction have a thickness in the range of 0.1 μm to 0.3 μm.

49. (Withdrawn) A thin-film magnetic head according to claim 40, wherein the laminate comprises the free magnetic layer, a nonmagnetic conductive layer, and an antiferromagnetic layer, for pinning the magnetic moment of the pinned magnetic layer by an exchange coupling magnetic field, which are deposited in that order.

50. (Withdrawn) A thin-film magnetic head according to claim 40, wherein the laminate comprises a nonmagnetic conductive layer, the pinned magnetic

layer, and an antiferromagnetic layer, for pinning the magnetic moment of the pinned magnetic layer by an exchange coupling magnetic field, which are deposited, in that order, on each of the two sides of the free magnetic layer in the thickness direction.

51. (Withdrawn) A thin-film magnetic head according to Claim 40, wherein other insulating layers extend between the hard bias layers and the lead layers and to the ends of the laminate in the track width direction.

52. (Withdrawn) A floating magnetic head comprising a slider and a thin-film magnetic head according to claim 40.

53. (Withdrawn) A floating magnetic head according to claim 52, wherein each of the insulating layers has a thickness in the range of 0.5 nm to 5 nm at the side faces of the laminate.

54. (Withdrawn) A floating magnetic head according to claim 52, wherein the insulating layers comprise at least one oxide selected from the group consisting of aluminum oxide, silicon oxide, tantalum oxide, titanium oxide, zirconium oxide, hafnium oxide, chromium oxide, vanadium oxide, and niobium oxide.

55. (Withdrawn) A floating magnetic head according to claim 52, wherein the insulating layers further extend between the hard bias layers and the substrate.

56. (Withdrawn) A floating magnetic head according to claim 55, wherein the hard bias layers and the insulating layers are separated by bias underlayers.

57. (Withdrawn) A spin-valve thin-film magnetic element according to claim 52, wherein the insulating layers further extend on the top ends of the laminate in the track width direction, and the overlay sections of the leads extend toward the center of the laminate compared with the insulating layers and are in contact with the laminate.

58. (Withdrawn) A floating magnetic head according to claim 57, wherein the insulating layers have a thickness in the range of 0.5 nm to 20 nm at top ends of the laminate.

59. (Withdrawn) A floating magnetic head according to claim 52, wherein the edges of the overlay sections in the track width direction have a thickness in the range of 0.01 μm to 0.05 μm in the track width direction.

60. (Withdrawn) A floating magnetic head according to claim 52, wherein the edges of the overlay sections in the track width direction have a thickness in the range of 0.1 μm to 0.3 μm.

61. (Withdrawn) A floating magnetic head according to claim 52, wherein the laminate comprises the free magnetic layer, a nonmagnetic conductive layer, and an antiferromagnetic layer, for pinning the magnetic moment of the pinned magnetic layer by an exchange coupling magnetic field, which are deposited in that order.

B1 cont

62. (Withdrawn) A floating magnetic head according to claim 52, wherein the laminate comprises a nonmagnetic conductive layer, the pinned magnetic layer, and an antiferromagnetic layer, for pinning the magnetic moment of the pinned magnetic layer by an exchange coupling magnetic field, which are deposited, in that order, on each of the two sides of the free magnetic layer in the thickness direction.

63. (Withdrawn) A floating magnetic head according to Claim 52, wherein other insulating layers extend between the hard bias layers and the lead layers and to the ends of the laminate in the track width direction.

64. – 70. (Cancelled)

102 71. (Currently amended) A spin-valve thin-film magnetic element comprising:

a substrate;

a laminate on the substrate, the laminate comprising at least a free magnetic layer and a pinned magnetic layer and exhibiting a magnetoresistive effect;

a pair of hard bias layers lying at least on both sides of the free magnetic layer in the track width direction and orienting the magnetic moment of the free magnetic layer in one direction;

a pair of lead layers lying at least on the hard bias layers; and

a pair of insulating layers, each lying at least between one side face of the laminate in the track width direction and each lead layer,

B1 Cancel

wherein the pair of lead layers have overlay sections which extend on ~~parts~~ top ends of the laminate, edges of the overlay sections extending beyond ends of the insulating layers towards the center of the laminate, the edges of the overlay sections being in contact with the laminate.